

**U.S. Environmental Protection Agency  
Science Advisory Board  
Science Advisory Board Radiation Advisory Committee Augmented for the Review of  
Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), Revision 2  
(Public Comment Draft)**

**Summary Minutes for the Public Meeting held on  
December 3, 2020**

**Meeting Participants:**

**SAB RAC-Augmented for MARSSIM (Rev 2) Review**

Dr. Brant Ulsh, Chair	Dr. Amy Kronenberg
Dr. Sally A. Amundson	Dr. Robert Litman
Dr. Roland Benke	Mr. Dennis Quinn
Dr. Harry M. Cullings	Dr. Richard Smith
Dr. Laurence Dauer	Dr. Daniel O. Stram
Dr. Timothy DeVol	Mr. Zoltan Szabo
Dr. Earl W. Fordham	Dr. Donald Wall
Dr. Eric Goldin	Dr. Wei-Hsung Wang
Ms. Barbara L. Hamrick	Dr. R. Craig Yoder
Dr. Kenneth G.W. Inn	

\*For the full SAB membership see Roster<sup>i</sup>

Designated Federal Officer

Dr. Diana Wong, Science Advisory Board Staff Office

Other Attendees

See Attachment A.

**Meeting Summary:**

Meeting convened

The Science Advisory Board (SAB) RAC Augmented for MARSSIM (Rev 2) Review convened for a public teleconference on December 3, 2020.

Dr. Wong, Designated Federal Officer (DFO) for the Panel, convened the meeting at approximately 1:00 p.m. EST. Dr. Wong called roll, all SAB RAC Augmented Panel members were present except Dr. Annie B. Kersting. Dr. Wong explained that the SAB RAC Augmented Panel operates under the authority of the Federal Advisory Committee Act (FACA). The SAB consists entirely of special government employees appointed by the EPA Administrator to their positions. As government employees all the members are subject to all applicable ethics laws and implementing regulations. She stated that for this SAB Advisory activity, no conflict of interest or loss of impartiality issues were identified for any panel member. Dr. Wong also stated that the

meeting was announced in advance in the Federal Register and there were opportunities for the public to provide comments.

Dr. Wong then turned the meeting over to Mr. Thomas Brennan, Director of the EPA's SAB Staff Office, for a welcome message. Mr. Brennan thanked the members of the panel, the federal government team, and the EPA's Office of Radiation and Indoor Air (ORIA) for their briefing to the panel members. Mr. Brennan reminded the participants that this is a preliminary meeting and the full review meeting will be held in January 2021.

Dr. Wong then turned the meeting over to Dr. Ulsh, Chair of the SAB RAC Augmented Review Panel. Dr. Ulsh introduced the panel members, reviewed the agenda, reminded the committee that today is not to deliberate or address the charge questions, and then invited the EPA representatives to begin their presentations.

#### EPA Presentation

Ms. Lee Ann Veal, Director of the EPA's Radiation Protection Division Office of Radiation and Indoor Air (ORIA), introduced herself and expressed appreciation to the panel for their time and expertise. She emphasized the importance of the review, specifically the new scientific and technical material in MARSSIM. Ms. Veal thanked the participating individuals who contributed to the work on MARSSIM and again thanked the panel for their effort. Ms. Veal then turned the meeting to Ms. Kathryn Snead, from EPA's ORIA and MARSSIM Workgroup Chair to brief the panel on the charge questions and supplemental information. Ms. Snead introduced and thanked the MARSSIM workgroup. She announced three topics covered in her briefing: MARSSIM Background, Revision 2 Introduction, and Review of Draft Charge. Materials associated with her briefing<sup>ii</sup> can be found on SAB webpage. Ms. Snead discussed the four agencies involved in the MARSSIM draft, highlighting the requirement of full consensus by the participating agencies. She explained that MARSSIM is oriented toward helping with compliance and is not a guidance document. She explained the difference between MARSSIM, Multi-Agency Radiation Survey and Assessment of Materials and Equipment Manual (MARSAME), and Multi-Agency Radiological Laboratory Analytical Protocols (MARLAP). Ms. Snead reviewed the introduction of MARSSIM including any updates or changes made since its first publication in 1997, she emphasized the importance of this current update of MARSSIM. Ms. Snead also reviewed the draft charge questions.

Dr. Ulsh stated that there were no public speakers registered and opened the conversation for questions from the panel for Ms. Snead.

A panel member inquired about a missing index in the current version, but Ms. Snead reassured the panel member that there will be an index in the final document. A few clarifying questions were brought up by panel members and Ms. Snead was able to address each one to the panel members' satisfaction. A question was brought up by a panel member asking if the members are permitted to review portions of MARSSIM that are not specific to the charge. Ms. Snead specified that some parts of MARSSIM have already been reviewed by a panel, but any portion that have been modified in Revision 2 would be new and open to review, if desired. A deliberative question was brought up by a panel member, Ms. Snead and Dr. Ulsh reminded the panel members that deliberative questions should be saved for the January meeting, when the

substantive review will be discussed. A few panel members asked about searchability within the review document and tracked changes; Ms. Snead reassured the panel members that the materials provided should be sufficient for their review and stated that a document with changes tracked is not possible due to the amount of changes made between documents. However, she stated that if supplemental materials are needed, she would be happy to provide them upon request. A panel member asked who the standard MARSSIM user will be. Ms. Snead said that after being trained on MARSSIM, someone with general or basic scientific knowledge should be able to understand the document.

No further questions were asked and Dr. Ulsh moved the meeting onto the review of charge questions by panel members.

#### Public comments

There were no registered public commenters.

#### SAB Panel Discussion

Dr. Ulsh asked Ms. Snead to read through the charge questions one by one and allow for clarifying questions or requests for edits by the panel members. Ms. Snead stated that there are three major questions with associated sub-questions. After review of each charge and discussion by the panel members the following questions and sub-questions were requested to be modified: 1, 1.3, 1.4, 1.5, 2, 2.1, 2.2, and 2.3. The majority of the changes were on the wording “technically accurate” and requested by panel members to be changed to “technically sound and appropriate.” Revised charge questions will be available on the SAB webpage.

#### Meeting adjourned

Dr. Wong informed the panel that there were no comments from the public but if the EPA had any clarifying comments they could now be asked. Ms. Snead stated that the EPA did not have any comments and recognized and understood the changes to be made. Dr. Wong discussed next steps for the panel which included sending any changes to charge questions to her by early next week (week of December 7, 2020). She informed the panel that once the revised questions are returned to her, she will send them to the panel members and provide their review assignments. Dr. Wong informed the listeners the next meeting dates will be January 11-14, 2021, 12:00 – 5 p.m. (EST) and stated it will be available via webcast.

Dr. Wong adjourned the meeting at approximately 3:45 p.m.

**Respectfully Submitted and Certified as Accurate,**

\_\_\_\_\_/s /  
Diana Wong, Ph.D.  
DFO

\_\_\_\_\_/s /  
Brant Ulsh, Ph.D.  
RAC Augmented for MARSSIM Chair

Date: January 29, 2021

**NOTE AND DISCLAIMER:** The minutes of this public meeting reflect diverse ideas and suggestions offered by committee members during the course of deliberations within the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect definitive consensus advice from the panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters, or reports prepared and transmitted to the EPA Administrator following the public meetings.

**Attachment A: Additional meeting participants in attendance or who requested the teleconference call-in number.**

<b>Name</b>	<b>Affiliation</b>
Kerstun Norman	US Nuclear Regulatory Commission
Derek Favret	DOE HQ
Boby Abu-Eid	SLS Advisor – US Nuclear Regulatory Commission
Wagnus D. Prioleau	USEPA
Gerald Falo	US Army
Mark Fuhrmann	US Nuclear Regulatory Commission
Oleg Povetko	USEPA
Ammie Martin	Environmental Standards, Inc.
Carolyn Kilgore	USEPA
Andrew Wallo	US DOE
Gary Chen	USEPA
Cynthia Barr	US NRC
Khanna Johnston	USEPA
Amanda Anderson	US DOE
Jennifer Mosser	US EPA
Ryan Carihfield	Tennessee Division of Radiological Health
Jerry Bingaman	State of Tennessee

**Materials Cited:**

The following meeting materials are available on the SAB website (<http://www.epa.gov/sab>) on the page for the December 3, 2020 meeting:

<https://yosemite.epa.gov/sab/sabproduct.nsf//MeetingCalBOARD/56617FF160E4399D852586080053971E?OpenDocument>

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<sup>i</sup> Roster

<sup>ii</sup> Agency Briefing Material